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# ABORIGINAL REMAINS IN THE CHAMPLAIN VALLEY

## SECOND PAPER

BY G. H. PERKINS

**I**N a former paper, published in this Journal (vol. xi, pp. 607–623) the writer described a portion of the aboriginal remains which have been found in the region which may be fairly included in the Champlain Valley.

It is the design of the present paper and of another to follow to complete what has already been written by some account of several classes of objects not included in the first paper. It is important to preserve and discuss the specimens found in the region named, because, here, as indeed in many another locality, the accumulation of any considerable number and variety of stone and other objects that were made and used by the ancient occupants is no longer possible. This is eminently true of a long and well settled area and one much visited by tourists as is that here considered. As indicated in the first paper, the only collections of much value that have been made in the Champlain Valley are: that in the Museum of the University of Vermont, which is by far the most important, that in the state collection at Montpelier, and that at Amherst College, collected on the west side of the Valley by the late Dr Kellogg.

In the former paper there were considered, Chipped objects, Gouges, Celts, Earthenware, Bone, Copper and Iron. In the following pages there will be considered Grooved Axes, Problematical Stones—bird stones, two-hole stones, boat-shaped stones, etc.—and Pipes.

All of the specimens figured and most of those mentioned are now in the two Vermont museums.

### GROOVED AXES

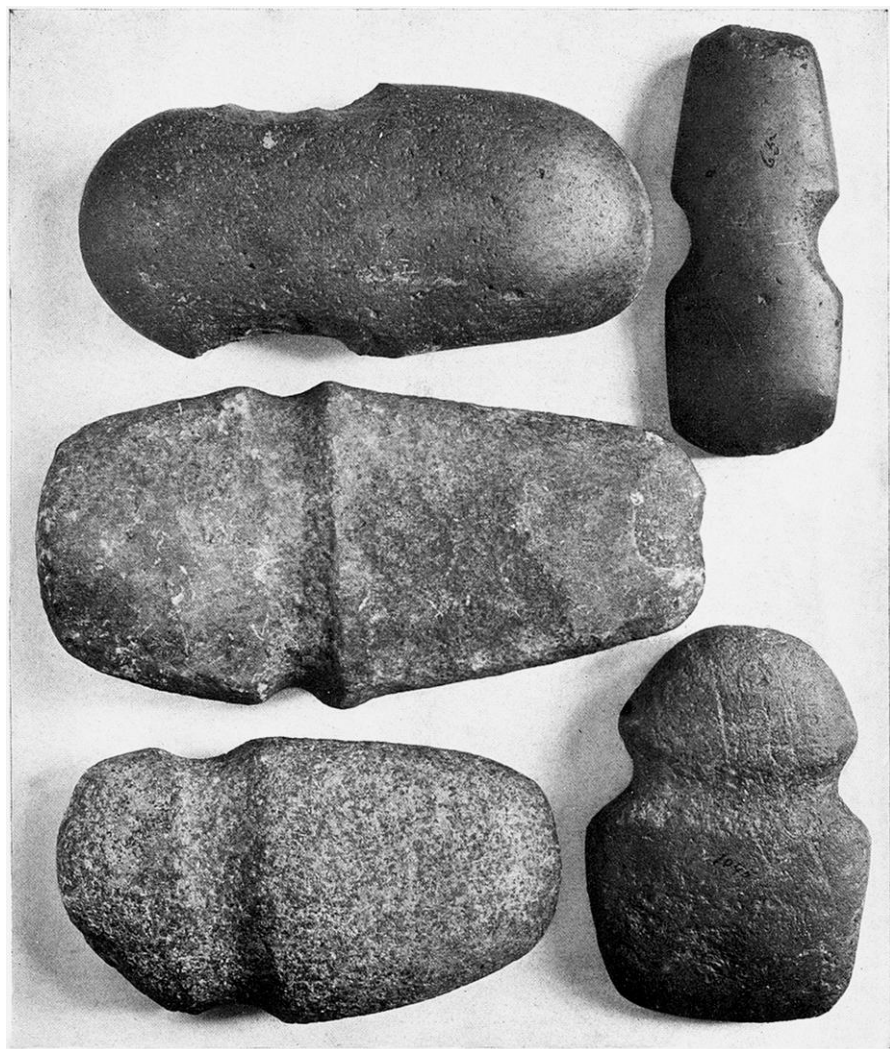
Grooved axes in a great variety of form and size, and of all degrees of elegance, have been obtained from the soil of this region .

Some are of the simplest and rudest character, shaped apparently with the least amount of labor while others equal our finest specimens in perfection of form and finish. Most of these axes are well made and give abundant evidence of the care and labor expended in their shaping from the flat, oval quartz pebbles from which they have been produced. The simplest are merely flat pieces of quartzite or other hard stone, even sandstone being occasionally used. Roughly shaped and notched only on the edges, these rude implements may have been often used as hammers rather than as axes and yet they have the ax form. Plate XII shows several forms and examples of the best of our Champlain Valley axes.

Most of these, as is true of all similar specimens, are so completely worked over the surface that it is not always possible to determine whether they were made from drift pebbles or from material broken from some nearby ledge. The specimen shown on the plate at the top, however, is very obviously made from a quartz pebble, water worn, and worked only so far as necessary to adapt it to its purpose. The smaller ax at the right of this is also obviously made from a pebble and probably also that at the lower right-hand corner, but the other two are not so plainly of the same sort. As the figures show, our better axes are ground or rubbed over the whole surface. At first, usually, the stone selected was hammered or pecked into the desired form and then rubbed smooth, but, when the ax was made from a pebble, the smooth, water worn surface was retained as far as possible. As the figures show, our axes differed materially in form from those of the west and south or even from those of the Ohio Valley. None are as large as some from these other localities nor do we ever find those in which the upper portion, that above the groove, is conical or pyramidal.

On the average, our axes are not more than six to eight inches long and three or four wide and they do not weight more than three or four pounds. Somewhat larger specimens occasionally occur, but none greatly exceed the dimensions given.

Clumsy and inefficient as these dull-edged tools seem to us they appear, nevertheless, to have been quite serviceable in the hands of those who knew how to use them. In speaking of a temporary encampment which his Algonkin companions made on one of the



GROOVED AXES FROM THE CHAMPLAIN VALLEY (REDUCED ONE-HALF)

large islands in the lake which bears his name, Champlain tells us that they built a barricade and cut "gros arbres" with "meschantes haches" for this purpose. As this was merely a stop of a single night it is not probable that these Indians wasted any great amount of labor upon the structure they had thought it necessary to make.

In all the best axes the groove is well defined and encircles the implement. As the figures show, the groove is sometimes near the middle, sometimes near the end opposite the edge. In the most perfect specimens the groove is as seen in the three lower figures of plate XII, but it may extend only across each end as in the two upper figures. It is rarely if ever made about three sides only, the fourth being left flat, as in specimens found in other places. I have seen but one specimen of this sort in our collections and this is doubtfully from this region.

Naturally, because of the labor of making them, the grooved axes are by no means as common as the celts. Indeed, finely wrought stone axes are among our least abundant specimens. In no part of this region have more than three or four been found in a single locality and usually only one or two.

#### PROBLEMATICAL OBJECTS

This name has been proposed, as it seems to me most wisely, to include a group of quite heterogeneous specimens, some of which may have been, and very probably were, used as amulets or charms, others as emblems of one sort or another, others as ornaments, while the design of some can not be conjectured with probability.

As every reader of archeological articles knows, a great variety of names have been assigned to these objects, some of them undoubtedly fanciful, others probably indicating the use to which this or that specimen was put. Some of these common names will be used, but without the intention of expressing thereby any certainty that the term applied is entirely correct. Unless found in an unfinished condition, these objects are all well shaped, finely finished, and were evidently considered by the makers of sufficient importance to be worthy of their best efforts.

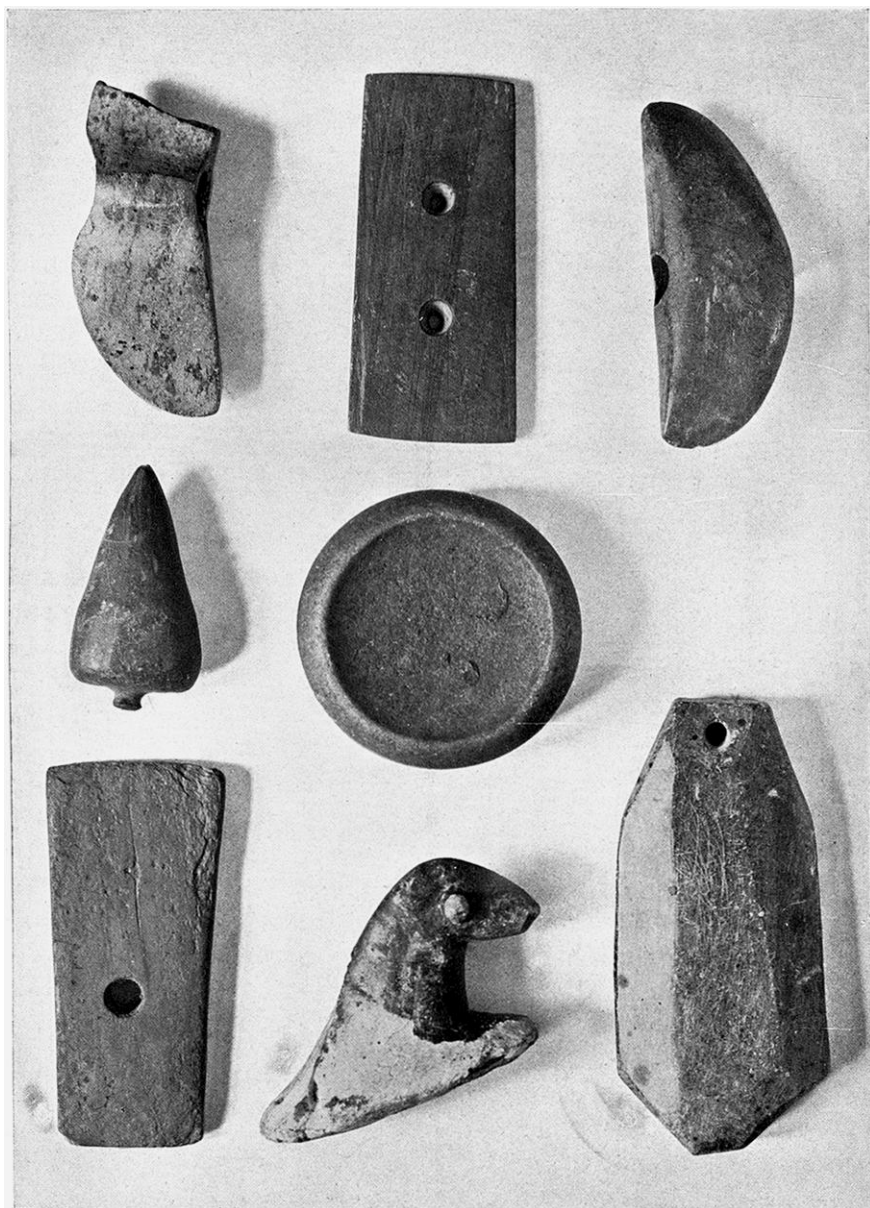
The material of which they are made is usually fine in grain and attractive in color. The kind of objects of which I am writing

is well exemplified in plates XIII-XV. The figures given on these plates show a large part of the best specimens of this class that have been found in the Champlain Valley. If this is true it follows that only a few have been obtained. It is probable that no large number of these objects was ever in existence, but that always they were the few cherished treasures of their owners. The plates show also how great a variety in form exists, and there is also variety in the color and character of the materials selected from which they were fashioned. All are of rather small size, only a few inches in length or breadth and usually much less in thickness.

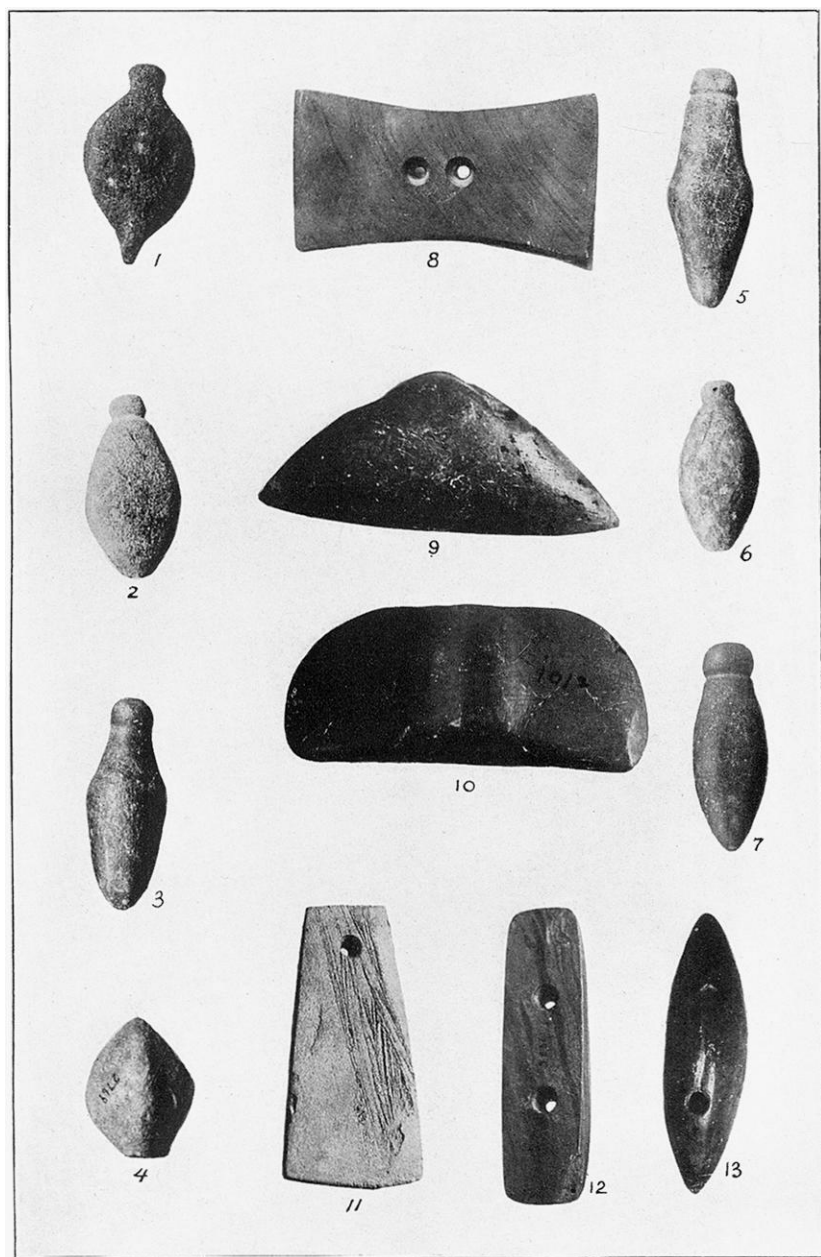
It is noticeable that none of our Champlain Valley specimens so closely resemble those of similar character found west or south as do these problematical forms. In many cases exact duplicates of specimens from mounds or graves, or from the surface soil, in the Ohio or Mississippi valleys or even on the Pacific Coast have been found here. From this it appears that these forms were more generally distributed and passed from tribe to tribe more commonly than other objects. It is also noticeable that while duplicates of our specimens are found in many and sometimes distant localities we find within our own area few duplicates, but rather some peculiarity in almost every specimen. While the general term "problematical stones" includes all the forms here mentioned, it will be convenient to subdivide the whole group, using well known names.

#### *1. Flat Perforated Stones or Pierced Tablets*

Regularly shaped pieces of slate, schist, etc., now and then occur in this region. Some of them may be incomplete and perhaps one or more holes would have been made had they been finished, but some appear finished as they are. Most of the flat specimens are perforated, as in the middle figure at the top, and the left figure at the bottom of plate XIII and figures 8, 11, 12 of plate XIV. Sometimes a little convex on one or both sides, these stones are more often quite flat and thin. As shown, there may be one or two holes, apparently for a thong by which the object could easily be hung or in some way attached to the person of the owner. In size these vary from six inches long, which is an unusual size, to two inches in length and about half as much in width. The specimens shown on

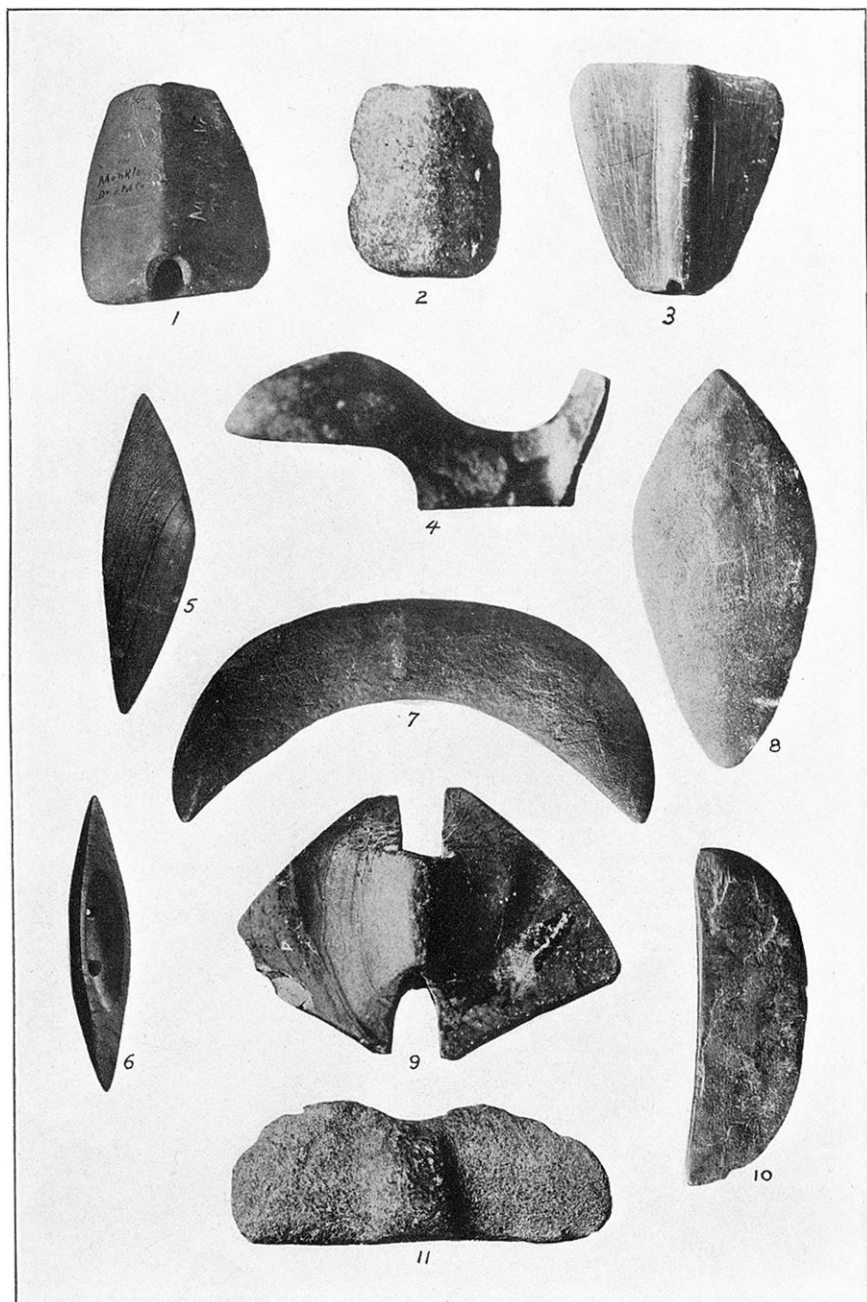


STONE AMULETS AND CEREMONIAL STONES FROM THE CHAMPLAIN VALLEY (ONE-HALF ACTUAL SIZE)



PENDANTS AND PROBLEMATICAL STONES FROM THE CHAMPLAIN VALLEY (REDUCED)





PROBLEMATICAL STONES FROM THE CHAMPLAIN VALLEY (REDUCED)

the plates are from one half to one third full size. In all, the hole or holes, there are never more than two, are reamed out on one side to about twice the diameter on the opposite side. The specimen figured at the bottom of plate XIII though thicker and heavier than other specimens may most properly be placed with those now under consideration. This, apparently a pendant, is of steatite, quite thick and, as may be seen, there is a wide bevel along each edge. The opposite side is flat.

### 2. *Winged Stones*

These are as carefully wrought as any specimens that we have. They are also about as rarely found as any. Figures at the top, corners of plate XIII, figure 10 of plate XIV and figures 1, 2, 3, and especially 9, of plate XV give good examples of these singular objects. They have been called, "ceremonial stones," "banner stones," etc. It has also been supposed by some that the large perforation seen in all these specimens was for the reception of a reed or handle of some sort in order that such an object might be used as a baton or scepter. Some of these are of comparatively soft stone, as slate or limestone, but some are of quartz or other very hard material and the difficulty of working these into shape must have been great. Whatever the purpose of these winged specimens they must have been considered of great importance by those who with so much labor worked them out. Most of the specimens figured are about half full size. The surface is always very smoothly ground and often polished. In some the sides are alike as they are in the upper figures on plate XIII. In other cases, one side is convex and the other concave, as in figure 2 of plate XV.

The specimen shown in figure 11 of plate XV is probably an incomplete form of those mentioned. It is of gray quartzite and in its present condition is quite rude. The specimens shown at the upper corners of plate XIII are quartz, 1, 3, 9 of plate XV are slate, while 2 is granite.

### 3. *Pick-shaped Stones*

One or two very rude examples of this form have been found, but only a single fine specimen, that shown in figure 7 of plate XV has been seen. This is perhaps unfinished. At any rate it is not

smoothed over the surface as are most of the specimens of this sort. It is of green stone, well formed, but not perforated. The entire length of this specimen, measured from point to point, is  $8\frac{3}{4}$  inches and its width in the middle is  $1\frac{7}{8}$  inches. The thickness in the middle, from which the surface is bevelled in both directions, is  $1\frac{3}{4}$  inches.

Specimens of small pick-shaped stones almost exactly like those figured by Dr Beauchamp and made from the same striped drab and black slate are found here though rarely. They are apparently more common in New York where Dr Beauchamp's specimens were found.

#### 4. *Boat-shaped Stones*

As has been repeatedly noticed of other problematical forms, boat-stones are rare in the Champlain Valley. Those specimens that do occur are of very fine material and elegantly formed and finished. Plate xv, figures 5 and 6, plate xiv, figures 9 and 13, are examples of these. That seen, very much reduced, on plate xiv is the largest that I have seen. It is made of a hard, gray, black lined, silicious stone. It is, as in all these specimens, excavated underneath and perforated by two holes. It is nearly  $5\frac{1}{2}$  inches long and, at the middle,  $1\frac{1}{2}$  inches high.

#### 5. *Bar Amulets*

Objects that for lack of a better name have been called by that given are also found here. For some reason they are not as carefully made as are the boat-stones nor are they usually perforated. One found in a grave at Swanton made of red slate and more finely finished than any other has the two holes always seen in the boat-stones, but I do not remember that any other is perforated.

In size these bar-shaped stones vary greatly. Our largest specimen is  $8\frac{1}{2}$  inches long,  $1\frac{1}{4}$  wide, and  $\frac{3}{4}$  high in the middle, from which the surface slopes in both directions. The smallest is only  $3\frac{1}{4}$  inches long and very slender. Most of these are flat on the under side and not at all excavated, but in one or two cases there is a small concavity.

### 6. *Bird-Stones*

Specimens which may be included under the above name are exceedingly uncommon in the Champlain Valley. The specimen shown in figure 4 of plate xv is unique here, for I have not seen another like it, though very similar forms are found west and south. The specimen figured is of a very pretty calcareous breccia, not very hard. It is perfectly shaped and finished, the surface is smooth, almost polished, all the edges are sharp, and there is no evidence of use. Through each end there is a small hole drilled obliquely so that it comes out below. This object is  $4\frac{1}{4}$  inches long, and 2 inches high. The base is  $1\frac{7}{8} \times \frac{3}{4}$  inches and, as may be seen, is rectangular and flat. A more decided effigy is that shown at the bottom of plate XIII. This was found in one of the Swanton graves and the dark upper part is colored green by copper carbonate from implements which were buried in the same grave. Some of these are figured in the former paper. The material is a hard, light-colored limestone. The base is pierced by a hole at each end. The surface is somewhat eroded, but was evidently well polished originally. The base is 3.15 inches by 1.3 inches and the height from top of head 2.65 inches. In a neighboring grave another of these objects was found. This is of red slate and is of about the same size as that figured, but of somewhat different proportions, the base being longer and the head pointed at the end.

### 7. *Pendants, Plummets*

Much more frequently occurring in our finds than the objects already mentioned are stones such as those shown in the figure to the left of the discoidal on plate XIII and figures 1-7 on plate XIV. It is quite likely that most of these were used as ornaments and others for different purposes, the ruder forms perhaps as net or line sinkers. Many of these objects are exceedingly well made and could scarcely have been intended for common use. Yet some of them, while regularly and carefully shaped, are not as carefully smoothed as one would expect in an ornament. The material selected for these stones is as varied as is the form. Some are of hard silicious stone, some from that which is softer and schistose.

In size these specimens are more uniform than are most of our

objects in any given class. They are none of them large, but average 3 or  $3\frac{1}{2}$  inches in length. Some are larger and the longest which I have seen is  $4\frac{1}{2}$  inches. Most are flattened on two sides, but some are nearly or quite cylindrical. The illustrations show well the different forms which have been found. The figures are rather less than one third full size.

#### 8. *Discoidal Stones*

Only a single specimen of this sort has been found, unless we include several very rude specimens which we must suppose to be unfinished. This is figured in the center of plate XIII.

As the figure shows, this is a fine specimen of its kind. It is made from white quartz and is a most admirable piece of stonework. Each side is cupped, as seen in the figure, and the edges strongly convex. Its diameter is 2.75 inches and its thickness at the rim of the depression 1.1 inches. No such specimen has been found near the surface, this being taken from one of the graves explored many years ago at Swanton. Apparently these graves were very old, some of them being beneath large pine trees. Indeed this burial place was not discovered until the pine forest growing above it was cleared off and the sandy surface, being by the clearing exposed to the wind, was in places removed and graves disclosed. This led to careful examination of the locality and the discovery of a considerable number of specimens of stone with a few of copper and shell. The writer described this burial place some years ago in the Proceedings of the American Association for the Advancement of Science, vol. XXII, pp. 76-100.

It is quite possible that the specimens figured on plate xv, figs. 8 and 10, should not be classed with the rest of the objects shown on the plate, but they are certainly problematical forms. That shown by figure 8 is of drab slate. Its surface is smoothed, but not polished. It may have been some tool for smoothing earthenware or rubbing skins, or it may have been an ornament. Several have been found, all very much alike. They are not thin enough to be fragile, but are not clumsy. They are four or five inches long and two wide.

Figure 10 has the form of some of our slate knives, but this is

of nearly uniform thickness throughout and there is no indication that an edge was contemplated by the maker. It is simply a thin, flat bit of red slate shaped as seen and ground smooth over the surface. The figure is about one half full size.

#### PIPES

On plates XVI and XVII there are figures of twelve of the stone pipes that have been found on the eastern side of the Champlain Valley. Other forms have been obtained on both sides of the lake, but the figures here shown will suffice to quite fully represent the forms found. As the writer has elsewhere described and figured several of the pipes of this region it will not be necessary to enlarge upon this part of the subject.

With the exception of the tubular pipes, of which an example is plate XVII, figure 1, all of our pipes are of quite small size, those figured being shown about half full size.

It is scarcely necessary to say that all are carefully and skilfully made. The material is mostly steatite, or other rather soft stone, as gypsum, of which the pipe in the lower left corner of plate XVI is made. This material is not found in this region, and like catlinite, one pipe of which has been found, it must have been brought from a distant locality. As will be noticed, three of the pipes figured are made with a stem as was most common in pipes of earthenware, as shown by figure 5, plate XVII, though other forms also are found in the earthenware pipes.

Only one platform pipe has been found, figure 2, on plate XVII. It is noticeable that the only attempts to imitate the human face that have been found in the Champlain Valley are seen in the two pipes figured on plates XVI and XVII. The face carved on the black steatite pipe shown on plate XVI is too rude to indicate much of the nationality of the model if there were any, but that shown on the pipe in figures 3 and 4 of plate XVII is evidently intended to represent a European. The face is rude, but nevertheless is not without considerable expression. So, too, the only animal effigy that I have seen from this region is that shown in the pipe at the upper left-hand corner of plate XVI. The almost entire absence of any such effigies in the Champlain Valley adds interest to these three specimens.

The pipe figured on plate xvii, figures 3 and 4, is of yellowish steatite wholly unlike any stone found in this vicinity. It is regrettable that it was not made from harder stone, for the finder has scratched letters upon it, much to its injury. Like several of the pipes it has near the lower edge a small hole apparently for suspension by a cord. The total height is  $2\frac{3}{4}$  inches, width  $1\frac{5}{8}$  inches at the lower part, thickness at the top  $\frac{3}{4}$  inch. It was found many years ago in Addison County and until lately has been an heirloom in the family of the finder. It is shown in figure 4, plate xvii, about three-fourths full size, while figure 3 is the same a little enlarged. Probably a hollow reed was the most common stem for these pipes, but the humerus or other long bone of some small bird was also used. I have a pipe from California in which the stem is still in place and it is a humerus of a bird about the size of a dove. I have spoken above of the use of catlinite pipes in this region. I know of only a single specimen. This is of larger size than any of those figured and is more modern in appearance, though it was plowed out of quite a depth of soil.

The remaining pipe, which is shown about two thirds full size in figure 1 of plate xvii, is of very peculiar form for an eastern specimen. On the Pacific Coast tubular pipes are not uncommon and here in a limited area on the eastern side of the Champlain Valley about a dozen have been found. They are all large, though varying in length from 13 inches to 7 inches. Most of this form have come from the graves in Swanton already mentioned, but a few have been found in other, but not distant, localities. As the figure shows, the bore at one end is as large as the size of the tube allows. At the opposite end the hole is reduced to half an inch in diameter and in several there was a loosely fitting stone plug. All are not exactly of the form of figure 1 of plate xvii but some are more like a ball club: others taper somewhat from the end where the bore is small. Still there is not great diversity in the appearance of all. It is interesting to note that besides the stone tubular pipes somewhat similar ones are found made of earthenware. Most of the pipes of earthenware, however, are shaped more like the stemmed forms as in figure 5 of plate xvii or those shown on plate xvi at the lower left hand. The first of these is of earthenware; all the others are stone.



STONE PIPES FROM THE CHAMPLAIN VALLEY (REDUCED ONE-HALF)





STONE PIPES FROM THE CHAMPLAIN VALLEY (3 FULL SIZE, OTHERS REDUCED)

Perhaps the writer may be allowed to add in closing that he has noticed the various specimens figured not because of any remarkable peculiarities they possess, but because they show something as to the nature and style of the objects used by the Iroquois and Algonkin occupants of the Champlain Valley. Specimens very nearly like those figured here have been found, and often in far greater number, in the west and south, as anyone may see by examining the collections of some of our museums or by consulting the numerous figures given in Mr Moorehead's most valuable *Stone Age*. From this it seems probable that most, at least, of the problematical forms had their origin outside of New England, and that either the objects themselves were imported from farther west, or those made elsewhere were imitated by the Indians of the Champlain Valley. Probably some of the forms originated here but the close resemblance of most to those found far more abundantly elsewhere suggests importation to a considerable extent.

It may be well to add that some of the tubular pipes and the last mentioned bird-stone are now in the American Museum of Natural History, New York City.

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